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EXAMINER

TRAN, HAI V

ART UNIT

PAPER NUMBER

2611

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/133,960

Applicant(s)

JOSHI ET AL.

Examiner

Hai Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/01/03 has been entered.

### ***Response to Arguments***

Applicant's arguments filed 08/01/03 have been fully considered but they are not persuasive.

Applicant argues, "... the combination of Krisbergh and Yasuki is legally deficient to establish a prima facie case of obviousness against claims 1, 32 and 36, because such combination does not disclose or suggest information signals that are independently transmitted..."

In response, the Examiner respectfully disagrees because the amended limitation "information signals that are independently transmitted" reads on the 1<sup>st</sup> information signal embedded in the VBI of one TV channel and is independently transmitted from the 2<sup>nd</sup> information signal embedded in the VBI of another TV channel (Col. 7, lines 32-40).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The amended claims 1, 32 and 36 contain subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. For example:

Limitation "...wherein the at least one information signal is independently transmitted" in amended Claim 1, lines 13-14;

Limitation "wherein the at least one information signal is independently transmitted and wherein the at least one return information signal is independently transmitted" in amended claim 32, lines 25-27;

Limitation "wherein the at least one information signal is independently transmitted and wherein the at least one return information signal is independently transmitted" in amended claim 36, lines 23-25.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-5, 8-11 and 32-33 are rejected under 35 U.S.C. 102(e) as being unpatentable over Krisbergh et al. (US 5999970)

Regarding claim 1, Krisbergh shows a wireless information signal transfer (Col. 3, lines 17-27) and interactive television system (Col. 1, lines 60-Col. 2, lines 35) comprises:

At least a first communication unit (Fig. 1, element 54) operatively coupled to a television set (Fig. 1, element 56), for generating at least one information signal ("the command input into the terminal 54 by the inputting device 58 wherein the terminal 54 generates a display signal "text/command signal" for display on the television set 56 such as on-line Chat sessions, URL for browsing through the information source... see Fig. 6, Col. 4, lines 51-65 and then the text/command signal is transmitted by an upstream transmitter 106 on an RF-modulated upstream channel 22 ...", Col. 4, lines 48-55) and for generating at least one display signal for display on the television set (by receiving a television program along with sequential portions of the "received information" inserted in the VBI at the terminal 54, the terminal 54 generates a television program display or extracts a "received information" from VBI, and then the terminal 54 displays the received TV programming or the received information on the television 56 respectively, see Col. 4, lines 36-65).

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A wireless signal transfer network (Fig. 1, network 12; Col. 3, lines 17-27), operatively coupled to the at least a first communication unit (terminal 54), for wirelessly transferring signals including the at least one information signal;

At least a second communication unit (Fig. 1, element 36), operatively coupled to the wireless transfer network 12, for receiving the at least one information signal (Cable Headend 36 receives the inputted "command" on the upstream channel of the distribution network 12; Col. 4, lines 48-60);

A server (Fig.1, element 38), operatively coupled to the at least a second communication unit (Cable Headend 36), for processing the at least one information signal and providing data included in the information signal to a function network 60 (the Headend Server 38 receives the forwarding "command" from the Headend 36, then the Headend Server 38 transmits a command based on the forward "command" to the information source 60; Col. 4, lines 48-60).

As to limitation "wherein at least one information signal is independently transmitted" reads on the 1<sup>st</sup> information signal embedded in the VBI of one TV channel and is independently transmitted from the 2<sup>nd</sup> information signal embedded in the VBI of another TV channel (Col. 7, lines 32-40).

Regarding claim 2, Krisbergh further discloses wherein the server 38 retrieves return data (forwarded command) from the functional network 60 and provides the return data to the at least a second communication unit 36, the at least a second communication unit 36 generating at least one return information signal and

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providing the at least one return information signal to the wireless signal transfer network 12, the wireless signal transfer network wirelessly transferring the at least one return information signal to the at least a first communication unit, which generates the at least one display signal for display on the television set (Col. 2, lines 20-34 and Col. 6, lines 48-Col. 8, lines 34).

Regarding claim 3, Krisbergh further discloses remote data entry and control means (Fig. 1, element 58), wirelessly coupled to the at least at first communication unit 54, for permitting a system user to control display of display signals on the television set 56 and enter data corresponding to the display of the display signal (Col. 4, lines 45-56 and Col. 8, lines 42-65).

Regarding claim 4, Krisbergh further discloses wherein the remote data entry and control means (Fig. 1, element 58) comprises an alphanumeric keyboard portion.

Regarding claim 5, Krisbergh further discloses wherein the alphanumeric keyboard portion (Fig. 1, element 58) is in infrared communication (Col. 8, lines 42-45) with the at least a first communication unit 54.

Regarding claim 8, Krisbergh further discloses wherein wireless transfer network 12 is a satellite network (Col. 3, lines 24-27).

Regarding claim 9, it is inherent for the two-way satellite communication system to have a transceiver between the satellite antenna and the communication system, wherein a transceiver is traditionally an RF or RF-digital device that receives and transmits the signal to/from the satellite. Thus, Krisbergh meets the claimed limitation "wherein the satellite network includes at least a pair of satellite transceivers and at least one satellite for transferring signals between the pair of transceivers, one and another of the pair of transceivers being operatively coupled to the at least a first communication unit and the at least a second communication unit respectively."

Regarding claim 10, Krisbergh a wide area network in Fig. 1 with elements router 40, CSU/DSU 42 connected to an ISP 60.

Regarding claim 11, Krisbergh discloses an ISP server in which a Mail server is inherently well known to be part of the ISP server (Col. 4, lines 59-65). Thus, Krisbergh meets the claimed limitation "wherein the WAN includes a Mail server."

Regarding claim 32, all limitations in claim 32 are analyzed with respect to claim 1 in combination with claims 2-3.

As to limitation "wherein at least one information signal is independently transmitted" reads on the 1<sup>st</sup> information signal embedded in the VBI of one TV channel and is independently transmitted from the 2<sup>nd</sup> information signal embedded



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in the VBI of another TV channel (Col. 7, lines 32-40) and "wherein the at least one return information signal is independently transmitted" is further met by Krisbergh (Col. 9, lines 1-5).

Regarding claim 33, Krisbergh further discloses wherein the at least a first communication unit comprises:

Processing means 54, operatively coupled to the wireless signal transfer network 12, for sending the at least one information signal ("the command input into the terminal 54 by the inputting device 58 wherein the terminal 54 generates a display signal "text/command signal" for display on the television set 56 such as on-line Chat sessions, URL for browsing through the information source... see Fig. 6, Col. 4, lines 51-65 and then the text/command signal is transmitted by an upstream transmitter 106 on an RF-modulated upstream channel 22 ...", Col. 4, lines 48-55 ) and receiving the at least one return information signal (by receiving a television program along with sequential portions of the "received information" inserted in the VBI at the terminal 54, the terminal 54 generates a television program display or extracts a "received information" from VBI, and then the terminal 54 displays the received TV programming or the received information on the television 56 respectively, see Col. 4, lines 36-65);

Input controlling means, operatively coupled to the processing means 54 and the remote data entry and control means 58, for receiving data and control

information from the remote data and control means and providing the information to the processing means (Col. 4, lines 48-56); and

Display signal generating means, operatively coupled to the processing means 54, for generating the at least one display signal for display on the television set (by receiving a television program along with sequential portions of the "received information" inserted in the VBI at the terminal 54, the terminal 54 generates a television program display), in response to the at least one return information signal received by the processing means and the data and control information from the remote data and control means (by receiving a television program along with sequential portions of the "received information" inserted in the VBI at the terminal 54, the terminal 54 extracts a "received information" from VBI, and then the terminal 54 displays the received information on the television 56, see Col. 4, lines 36-65).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Gorman (US 6141356).

Regarding claim 6, Krisbergh does not disclose wherein the remote data entry and control 58 means comprise a speakerphone portion.

Gorman discloses a set of radio devices (Fig. 3, elements 54-57) comprises the wireless speakerphone (Col. 7, lines 17-23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh by including the speakerphone as a data entry device in order to provide customers with the ability to communicate with the system giving it DTMF commands, and thus making it more convenient (Col. 7, lines 13-17).

Regarding claim 7, Gorman further discloses the speakerphone portions is in RF communication with the at least a first communication unit (Col. 6, lines 64-67 where communication unit combines items 53, 62 and the STB on top TV 69 of Fig. 3, see Col. 8, lines 53-56).

3. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Arledge et al. (US 5561703).

Regarding claims 12-14, Krisbergh does not show that the functional network is a paging network that includes a paging server and a plurality of pagers.

Arledge discloses the functional network being a paging network that includes a paging server and a plurality of pagers (Abstract, lines 6-9; Fig. 1, elements 3, 13 and 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh by including the functional network being a paging network, that includes a paging server and a plurality of pagers in order to be able to deliver messages to the users on the road.

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4. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Cunningham et al. (US 5991596).

Regarding claims 15-16, Krisbergh does not disclose wherein the functional network is an emergency response network including a server.

Cunningham discloses the functional network containing an emergency response network including a server 18 (Col. 4, lines 29-43; Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh by including the emergency services to the network, as taught by Cunningham, so to provide a "911" capability for interested subscribers (Col. 6, lines 38-40).

5. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Tyroler (US 6320941).

Regarding claims 17-18, Krisbergh does not disclose wherein the at least a first communication unit comprises indications means wherein the indication means is an LED.

Tyroler discloses a device comprises having LED indicator for notifying user of incoming message (Fig. 1, Col. 2, lines 60-Col. 3, lines 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh by including a LED indicator, as taught by Tyroler, so notify user of a received message (at least one return information signal has been arrived) without any prompting from the user (Col. 2, lines 5-8).

6. Claims 19-22, 26-28 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Schein et al. (US 6263501).

Regarding claims 19-20, Krisbergh does not clearly disclose at least one display signal includes data to generate at least one menu-driven window on the TV set by the first communication unit.

Schein discloses at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to E-Mail messages (Fig. 19A, element 14; Fig. 19B-C; Col. 23, lines 1-18) on the TV set by the STB unit Fig. 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh by including at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to E-Mail messages on the TV set, as taught by Schein, so to provide to user a visual interface to interact with received information (Col. 2, lines 20-25).

Regarding claim 21, Schein further discloses a STB (first communication unit) generates a message string to be included as part of the at least one information signal containing information entered by the user in the E-Mail window "Create message" (Col. 23, lines 14-18).

Regarding claim 22, Krisbergh discloses the functional network is WAN (Fig. 1, Router, CSU/DSU and ISP) wherein a Mail server is inherently well known to be part of the ISP server (Col. 4, lines 59-65) and further wherein the server (Fig. 1,

element 38), coupled to the at least a second communication unit (Cable Headend 36) provides the message string (one information signal and providing data included in the information signal) to the ISP 60 (Mail Server; Col. 4, lines 48-60).

Regarding claim 26, Schein further discloses wherein the at least one menu-driven window includes displayable information relating to financial market transactions (Fig. 21C-F).

Regarding claim 27, Schein further discloses a STB (first communication unit) generates a message string to be included as part of the at least one information signal containing information entered by the user in the financial transaction windows (Fig. 21D, Col. 23, lines 58-Col. 24, lines 6).

Regarding claim 28, Krisbergh discloses the functional network is WAN (Fig. 1, Router, CSU/DSU and ISP) wherein the server (Fig. 1, element 38), coupled to the at least a second communication unit (Cable Headend 36) provides the message string (one information signal and providing data included in the information signal) to the WAN.

Regarding claim 34, Schein further discloses wherein the at least one display signal generated by the display signal generating means is a digital signal and wherein the at least a device unit further comprises D/A conversion means,

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operatively coupled to the display signal generating means, for converting the digital display signal to analog form for display on the TV set (Col. 6, lines 29-43).

Regarding claim 35, Krisbergh discloses that the system could transmit E-Mail, Chat-room message and alike by using a keyboard (Col. 4, lines 45-56), wherein the keyboard signal supposedly is a digital signal that converts to analog signal and then it combines with the incoming signal from the Headend (analog) in order to display the command and the video data on the TV set. Thus Krisbergh meets and encompasses the claimed limitation "a signal combiner, operatively coupled between the D/A conversion means and the TV set, for combining the analog display signal with at least another analog signal received from the wireless transfer network and providing the combined signals to the TV set."

7. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Schein et al. (US 6263501), and further in view of Yuen (US 5812931).

Regarding claims 23-24, Krisbergh and Schein do not clearly disclose displayable information relating to paging messages wherein the message string to be included as part of the at least one information signal containing information entered by the user in the paging windows.

Yuen discloses the TV displaying and sending the paging messages (Fig.1 and 3; Abstract; Col. 1, lines 61-64). Therefore, it would have been obvious to one

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of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Schein by including displayable information relating to a paging message, as taught by Yuen, so to offer to user an alternative way of communication such as two-way paging system, by taking the advantage the current cable network infrastructure (Col. 3, lines 4-7).

8. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Schein et al. (US 6263501), and further in view of Yuen (US 5812931) and further in view of Arledge et al. (US 5561703).

Regarding claim 25, Krisbergh, Schein and Yuen do not clearly disclose pager server; However, and Krisbergh discloses wherein the server (Fig.1, element 38), coupled to the at least a second communication unit (Cable Headend 36) provides the message string (one information signal and providing data included in the information signal) to the functional network (WAN) and Yuen discloses a functional network is a paging network (Fig. 3, elements 37 and 38).

Arledge Fig. 1 discloses the PBX 3 is connected to the paging server 13 (voice response unit 17 of Fig. 1, Col. 4, lines 45-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Schein and Yuen by having a paging server, as taught by Arledge, so to permit it to be customized by each user for his preferred settings (Col. 4, lines 1-30).



9. Claims 29 –31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Schein et al. (US 6263501), and further in view of Cunningham et al. (US 5991596).

Regarding claims 29 and 30, Krisbergh does not disclose the menu-driven window includes displayable information relating to emergency message and wherein the message string to be included as part of the at least one information signal containing information entered by the user in the emergency message windows;

Schein the menu-driven window includes displayable information relating to receiving/sending message (Fig. 19A, element 14; Fig. 19B-C; Col. 23, lines 1-18) on the TV set by the STB unit Fig. 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh by including at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to sending/receiving (E-Mail) messages on the TV set, as taught by Schein, so to provide to user a visual interface to interact with received information (Col. 2, lines 20-25).

Krisbergh in view of Schein do not clearly disclose "displayable information relating to emergency message and wherein the message string to be included as part of the at least one information signal containing information entered by the user in the emergency message."

Cunningham discloses the functional network 24 containing an emergency response network for routing emergency messages to corresponding users (Col. 4,

lines 29-43; Fig. 2, 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Schein by including the emergency services to the network, as taught by Cunningham, so to provide an add-on "911" capability for interested subscribers (Col. 6, lines 38-40).

Regarding claim 31, In combination with claims 1, 19, 29 and 30, Krisbergh discloses a server (Fig. 1, element 38), coupled to the at least a second communication unit (Cable Headend 36) provides the message string (one information signal and providing data included in the information signal) to the functional network WAN.

Cunningham discloses the functional network 24 is an emergency response network 24 having an emergency response server 18 for routing emergency messages to corresponding users (Col. 4, lines 29-43; Fig. 2, 3, element 24) through Internet 17 and Broadcast Satellite Ground Terminal 19.

Therefore, it would have been obvious to replace Krisbergh's functional network WAN (Fig. 1, elements 38, 40, 42) to Cunningham's functional network 24 (emergency response network) coupled to an emergency response server 18, as taught by Cunningham, so to provide a two-way service "911" capability for interested subscribers (Col. 6, lines 38-40).

10. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Yasuki (US 6285407).

Regarding claim 36, Krisbergh discloses a wireless information signal (Col. 3, lines 17-27) transfer interactive television system (Col. 1, lines 60-Col. 2, lines 35) comprises:

At least a first communication unit (Fig. 1, element 54) operatively coupled to a television set (Fig. 1, element 56), for generating at least one information signal ("the command input into the terminal 54 by the inputting device 58 wherein the terminal 54 generates a display signal "text/command signal" for display on the television set 56 such as on-line Chat sessions, URL for browsing through the information source... see Fig. 6, Col. 4, lines 51-65 and then the text/command signal is transmitted by an upstream transmitter 106 on an RF-modulated upstream channel 22 ...", Col. 4, lines 48-55) and for generating at least one display signal for display on the television set (by receiving a television program along with sequential portions of the "received information" inserted in the VBI at the terminal 54, the terminal 54 generates a television program display or extracts a "received information" from VBI, and then the terminal 54 displays the received TV programming or the received information on the television 56 respectively, see Col. 4, lines 36-65).

Remote keyboard device (Fig. 1, element 58), wirelessly coupled to the at least at first communication unit 54, for permitting a system user to control display of display signals on the television set 56 and enter data corresponding to the display of the display signal (Col. 4, lines 45-56 and Col. 8, lines 42-65).

Krisbergh further discloses wherein wireless transfer network 12 is a satellite network (Col. 3, lines 24-27), operatively coupled to the at least a first communication unit 54, for wirelessly transferring signals including the at least one information signal ("the command input into the terminal 54 by the inputting device 58 wherein the terminal 54 generates a display signal "text/command signal" for display on the television set 56 such as on-line Chat sessions, URL for browsing through the information source... see Fig. 6, Col. 4, lines 51-65 and then the text/command signal is transmitted by an upstream transmitter 106 on an RF-modulated upstream channel 22 ...", Col. 4, lines 48-55);

A wireless signal transfer network operatively coupled to the at least a first communication unit (terminal 54), for wirelessly transferring signals including the at least one information signal;

At least a second communication unit (Fig. 1, element 36), operatively coupled to the satellite network 12 (Col. 3, lines 17-27), for receiving the at least one information signal (Cable Headend 36 receives the inputted "command" on the upstream channel of the distribution network 12; Col. 4, lines 48-60);

A server (Fig.1, element 38), operatively coupled to the at least a second communication unit (Cable Headend 36), for processing the at least one information signal (the Headend Server 38 receives the forwarding "command" from the Headend 36) and providing data included in the information signal to a network 60 (then the Headend Server 38 transmits a command based on the forward "command" to the information source 60; Col. 4, lines 48-60).

Wherein the server 38 retrieves return data (forwarded command) from the functional network 60 and provides the return data to the at least a second communication unit 36, the at least a second communication unit 36 generating at least one return information signal and providing the at least one return information signal to the satellite network 12 (Col. 3, lines 17-27), the satellite network wirelessly transferring the at least one return information signal to the at least a first communication unit, which generates the at least one display signal for display on the television set (Col. 2, lines 20-34 and Col. 6, lines 48-Col. 8, lines 34).

As to limitation "wherein at least one information signal is independently transmitted" reads on the 1<sup>st</sup> information signal embedded in the VBI of one TV channel and is independently transmitted from the 2<sup>nd</sup> information signal embedded in the VBI of another TV channel (Col. 7, lines 32-40) and "wherein the at least one return information signal is independently transmitted" is met by Krisbergh (Col. 9, lines 1-5).

Krisbergh does not clearly disclose displaying at least one display signal superimposed on a conventional television signal. However, Krisbergh's system suggests that the process of rendering screen for display by a screen renderer or the like is well known and need not to be further described here (Col. 7, lines 18-20).

Yasuki discloses a television terminal (Fig. 1) with a mass storage device 134, a signal combiner 116 and displaying at least one display signal superimposed on a conventional television signal (Fig. 4A-C; Col. 7, lines 58-Col.8, lines 27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time

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the invention was made to modify Krisbergh's system with a signal combiner and displaying at least one display signal superimposed on a conventional television signal, as taught by Yasuki, so to provide a multi-function TV receiver which is capable of executing process related to objects which are transmitted in a accompany with TV signals and objects which are utilized in network including servers for improving utility value and achieving convenience (Col. 3, lines 15-20).

Regarding claim 37, it is inherent for the two-way satellite communication system to have a transceiver between the satellite antenna and the communication system, wherein a transceiver is traditionally an RF or RF-digital device that receives and transmits the signal to/from the satellite. Thus, Krisbergh meets the claimed limitation "wherein the satellite network includes at least a pair of satellite transceivers and at least one satellite for transferring signals between the pair of transceivers, one and another of the pair of transceivers being operatively coupled to the at least a first communication unit and the at least a second communication unit respectively."

Regarding claim 38, Krisbergh a wide area network in Fig. 1 with elements router 40, CSU/DSU 42 connected to an ISP 60.

Regarding claim 39, Krisbergh further discloses wherein the WAN is the Internet (Col. 4, lines 57-65).

11. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Yasuki (US 6285407) and further in view of Arledge et al. (US 5561703).

Regarding claim 40, Krisbergh and Yasuki do not show that the functional network is a paging network that includes a paging server and a plurality of pagers.

Arledge discloses the functional network being a paging network that includes a paging server and a plurality of pagers (Abstract, lines 6-9; Fig. 1, elements 3, 13 and 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Yasuki by including the functional network being a paging network, that includes a paging server and a plurality of pagers, as taught by Arledge, in order to be able to deliver messages to the users on the road.

12. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Yasuki (US 6285407) and further in view of Cunningham et al. (US 5991596).

Regarding claim 41, Krisbergh and Yasuki do not disclose wherein the functional network is an emergency response network including a server.

Cunningham discloses the functional network containing an emergency response network including a server 18 (Col. 4, lines 29-43; Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Yasuki by including the emergency

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services to the network, as taught by Cunningham, so to provide a "911" capability for interested subscribers (Col. 6, lines 38-40).

13. Claims 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Yasuki (US 6285407) and further in view of Tyroler (US 6320941).

Regarding claims 42-43, Krisbergh and Yasuki do not disclose wherein the at least a first communication unit comprises indications means wherein the indication means is an LED.

Tyroler discloses a device comprises having LED indicator for notifying user of incoming message (Fig. 1, Col. 2, lines 60-Col. 3, lines 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Yasuki by including a LED indicator, as taught by Tyroler, so notify user of a received message (at least one return information signal has been arrived) without any prompting from the user (Col. 2, lines 5-8).

14. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Yasuki (US 6285407) and further in view of Schein et al. (US 6263501).

Regarding claim 44, Krisbergh and Yasuki do not clearly disclose at least one display signal includes data to generate at least one menu-driven window on the TV set by the first communication unit.



Schein discloses at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to E-Mail messages (Fig. 19A, element 14; Fig. 19B-C; Col. 23, lines 1-18) on the TV set by the STB unit Fig. 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Yasuki by including at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to E-Mail messages on the TV set, as taught by Schein, so to provide to user a visual interface to interact with received information (Col. 2, lines 20-25).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee et al. (US 6049539) shows an access system and method for providing interactive access to an information source through a networked distribution.

Matthews, III (US 5654748) shows an interactive program identification system.

### **Contact Fax Information**

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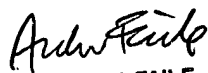
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is (703) 308-7372. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

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02/21/2003

  
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SUPERVISORY PATENT EXAMINER  
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